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Sunlight, Ultraviolet Radiation, and the Skin

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Karen Patrias and Alan N. Moshell

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SUNLIGHT, ULTRAVIOLET RADIATION. AND THE SKIN

Sunlight is essential for life as we know it. However, sunlight and artificial sources of ultraviolet light have the potential for acute and chronic adverse effects on the skin. Our ability to measure and quantitate the effects of ultraviolet radiation on the skin has improved greatly in recent years. In the past decade, there has been a dramatic change in our ability to protect the skin from ultraviolet radiation. In the past year, preliminary evidence has been presented indicating that some chronic effects of sunlight and ultraviolet exposure may be reversible through the use of prescription medications. There has also been increased awareness among the general population as to the adverse effects of excessive ultraviolet exposure, yet large segments of the population still avidly seek exposure to both natural and artificial sources of ultraviolet radiation. Considerable controversy remains concerning specific adverse effects caused by various wavelengths of ultraviolet radiation, the magnitude of the adverse effects, and potential strategies for prevention and/or treatment of these adverse effects.

This bibliography was prepared in support of the National Institutes of Health Consensus Development Conference titled Sunlight, Ultraviolet Radiation, and the Skin held in Bethesda, Maryland, on May 8-10, 1989. It consists of journal articles in all languages from 1984 to the present on all aspects of the effects of ultraviolet radiation and sunlight on the skin and the prevention and reversal of those effects. The topics include: sources of ultraviolet radiation, acute and chronic effects, metabolic effects, immune effects, effects of melanin and other hereditary factors, effects of occupation, disease and/or treatment, and the effects of ozone depletion. Furthermore, the areas of intentional exposure to ultraviolet, prevention of ultraviolet effects in the skin, and the potential for the reversal of ultraviolet effects are included. Both human and animal studies are included. For the most part, citations have been limited to full scale original articles or reviews rather than editorials, letters, or such similar short communications. Preference has also been given to articles appearing in refereed journals. Arrangement of the bibliography is by ten subject categories which parallel the organization of the scientific presentations at the Consensus Conference. Individual citations are listed only once, in the most appropriate category.

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SS 3 = 1 OR 2
SS 4 = EXP SKIN
SS 5 - SKIN DISEASES (PX)
SS 6 = EXP G10.795
SS 7 = EXP C16.131.831
SS 8 = EXP MELANOMA OR MELANINS
SS 9 = EXP D26.368.878
SS 10 = 4 OR 5 OR 6 OR 7 OR 8 OR 9
SS 11 = 3 AND 10
SS 12 = EXP PHOTOTHERAPY/AE OR PUVA THERAPY/AE
SS 13 = 11 OR 12

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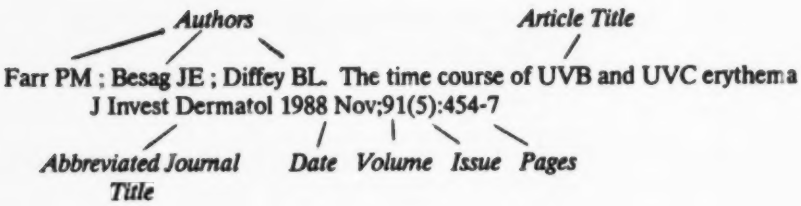

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OVERVIEW

Sources of UV

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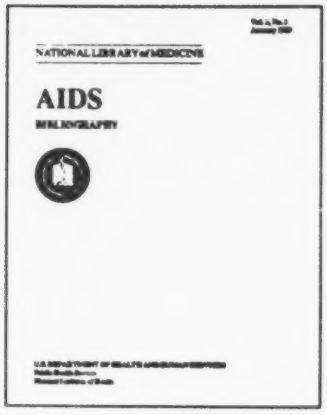

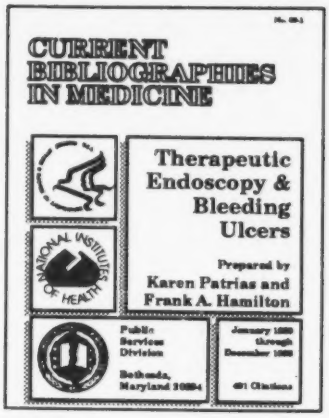

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